

**Foreland Slope and Foredeep, Assessment Unit 11090103  
Assessment Results Summary**

[MMBO, million barrels of oil. BCFG, billion cubic feet of gas. MMBNGL, million barrels of natural gas liquids. MFS, minimum field size assessed (MMBO or BCFG). Prob., probability (including both geologic and accessibility probabilities) of at least one field equal to or greater than the MFS. Results shown are fully risked estimates. For gas fields, all liquids are included under the NGL (natural gas liquids) category. F95 represents a 95 percent chance of at least the amount tabulated. Other fractiles are defined similarly. Fractiles are additive under the assumption of perfect positive correlation. Shading indicates not applicable]

Field Type	MFS	Prob. (0-1)	Undiscovered Resources												Largest Undiscovered Field (MMBO or BCFG)			
			Oil (MMBO)				Gas (BCFG)				NGL (MMBNGL)				F95	F50	F5	Mean
			F95	F50	F5	Mean	F95	F50	F5	Mean	F95	F50	F5	Mean				
Oil Fields	7	1.00	239	426	748	452	338	633	1,164	678	20	38	71	41	23	39	77	43
Gas Fields	42						495	1,047	2,018	1,126	10	21	43	23	92	149	282	162
Total		1.00	239	426	748	452	833	1,680	3,183	1,804	30	59	114	64				

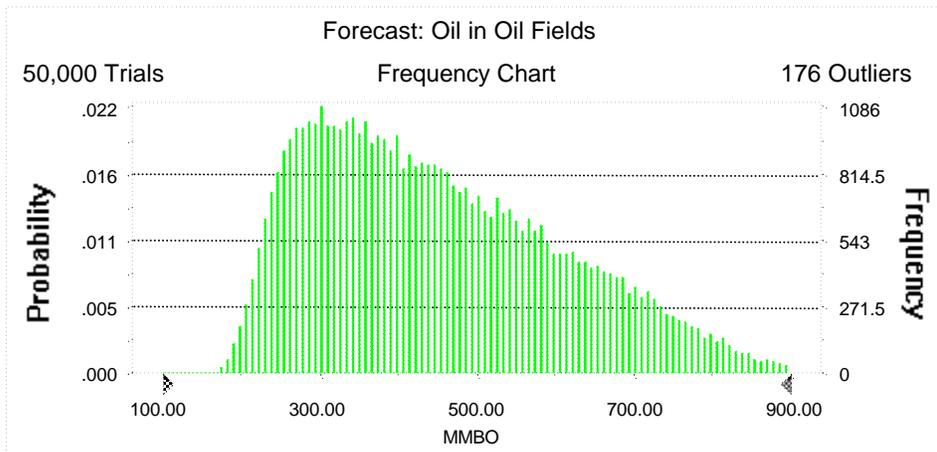
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**Forecast: Oil in Oil Fields**

Summary:

Display range is from 100.00 to 900.00 MMBO  
Entire range is from 153.34 to 1,057.65 MMBO  
After 50,000 trials, the standard error of the mean is 0.71

Statistics:	Value
Trials	50000
Mean	452.03
Median	426.25
Mode	---
Standard Deviation	159.76
Variance	25,523.15
Skewness	0.58
Kurtosis	2.61
Coefficient of Variability	0.35
Range Minimum	153.34
Range Maximum	1,057.65
Range Width	904.31
Mean Standard Error	0.71



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**Forecast: Oil in Oil Fields (cont'd)**

Percentiles:

<u>Percentile</u>	<u>MMBO</u>
100%	153.34
95%	239.22
90%	262.64
85%	282.91
80%	302.42
75%	321.74
70%	341.50
65%	361.32
60%	381.96
55%	403.12
50%	426.25
45%	449.67
40%	474.03
35%	501.25
30%	530.61
25%	562.04
20%	596.03
15%	637.36
10%	684.91
5%	748.25
0%	1,057.65

End of Forecast

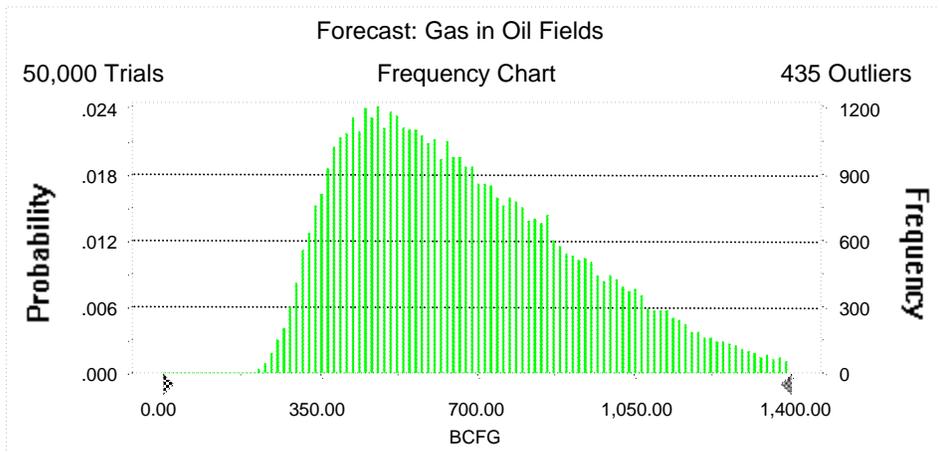
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**Forecast: Gas in Oil Fields**

Summary:

Display range is from 0.00 to 1,400.00 BCFG  
Entire range is from 194.58 to 1,891.12 BCFG  
After 50,000 trials, the standard error of the mean is 1.16

Statistics:	Value
Trials	50000
Mean	677.76
Median	633.35
Mode	---
Standard Deviation	259.21
Variance	67,190.85
Skewness	0.75
Kurtosis	3.17
Coefficient of Variability	0.38
Range Minimum	194.58
Range Maximum	1,891.12
Range Width	1,696.54
Mean Standard Error	1.16



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**Forecast: Gas in Oil Fields (cont'd)**

Percentiles:

<u>Percentile</u>	<u>BCFG</u>
100%	194.58
95%	337.71
90%	379.19
85%	412.37
80%	443.90
75%	474.22
70%	504.31
65%	534.19
60%	566.27
55%	599.08
50%	633.35
45%	668.63
40%	706.33
35%	747.71
30%	792.83
25%	841.66
20%	896.36
15%	962.79
10%	1,046.21
5%	1,164.40
0%	1,891.12

End of Forecast

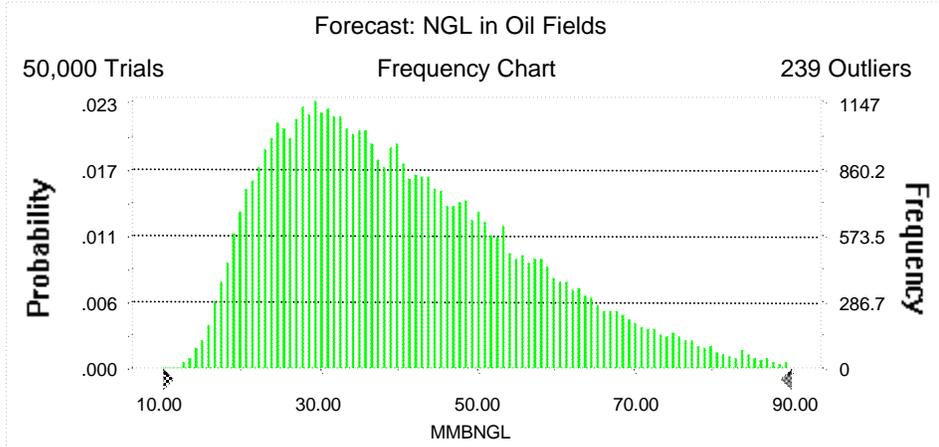
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**Forecast: NGL in Oil Fields**

Summary:

Display range is from 10.00 to 90.00 MMBNGL  
 Entire range is from 10.91 to 115.79 MMBNGL  
 After 50,000 trials, the standard error of the mean is 0.07

Statistics:	<u>Value</u>
Trials	50000
Mean	40.68
Median	37.90
Mode	---
Standard Deviation	15.82
Variance	250.42
Skewness	0.78
Kurtosis	3.31
Coefficient of Variability	0.39
Range Minimum	10.91
Range Maximum	115.79
Range Width	104.88
Mean Standard Error	0.07



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**Forecast: NGL in Oil Fields (cont'd)**

Percentiles:

<u>Percentile</u>	<u>MMBNGL</u>
100%	10.91
95%	19.98
90%	22.50
85%	24.61
80%	26.53
75%	28.39
70%	30.18
65%	31.99
60%	33.85
55%	35.82
50%	37.90
45%	40.06
40%	42.39
35%	44.84
30%	47.58
25%	50.48
20%	53.78
15%	57.93
10%	62.97
5%	70.65
0%	115.79

End of Forecast

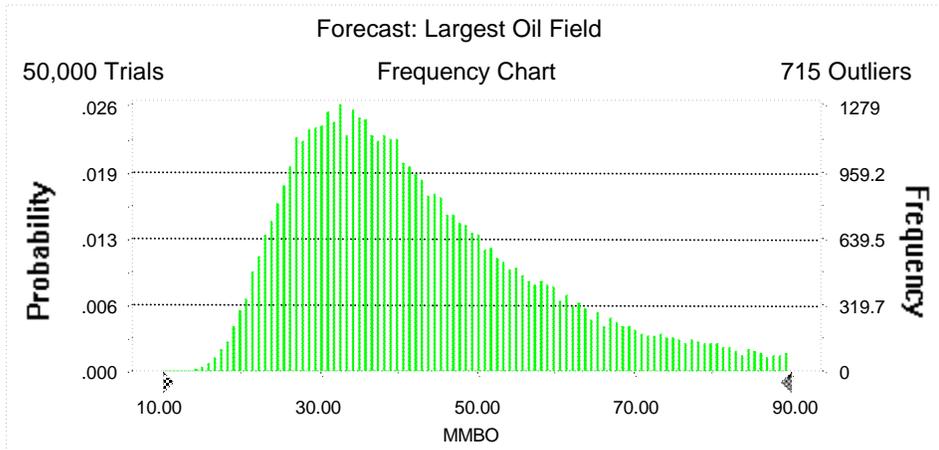
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**Forecast: Largest Oil Field**

Summary:

Display range is from 10.00 to 90.00 MMBO  
Entire range is from 13.22 to 99.99 MMBO  
After 50,000 trials, the standard error of the mean is 0.07

Statistics:	<u>Value</u>
Trials	50000
Mean	43.12
Median	39.49
Mode	---
Standard Deviation	16.33
Variance	266.52
Skewness	1.03
Kurtosis	3.77
Coefficient of Variability	0.38
Range Minimum	13.22
Range Maximum	99.99
Range Width	86.77
Mean Standard Error	0.07



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**Forecast: Largest Oil Field (cont'd)**

Percentiles:

<u>Percentile</u>	<u>MMBO</u>
100%	13.22
95%	23.08
90%	25.67
85%	27.60
80%	29.36
75%	31.04
70%	32.67
65%	34.34
60%	35.96
55%	37.73
50%	39.49
45%	41.39
40%	43.51
35%	45.86
30%	48.54
25%	51.64
20%	55.41
15%	60.00
10%	66.43
5%	76.82
0%	99.99

End of Forecast

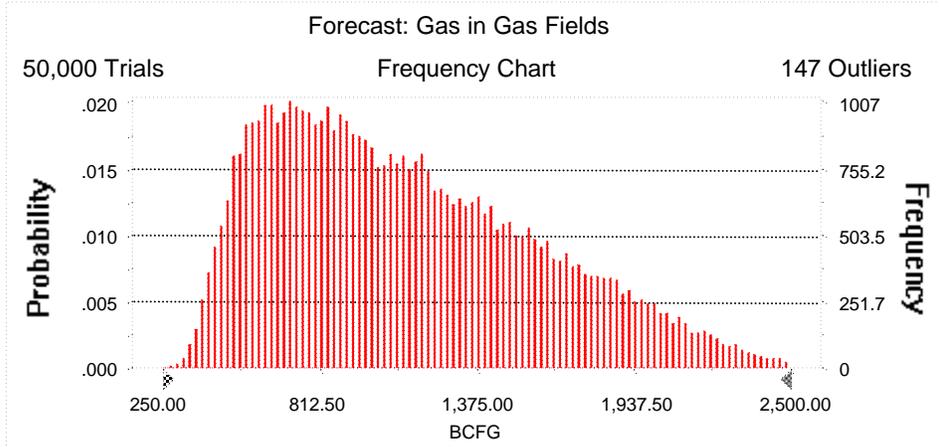
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**Forecast: Gas in Gas Fields**

Summary:

Display range is from 250.00 to 2,500.00 BCFG  
 Entire range is from 257.73 to 2,947.39 BCFG  
 After 50,000 trials, the standard error of the mean is 2.14

Statistics:	<u>Value</u>
Trials	50000
Mean	1,126.04
Median	1,046.62
Mode	---
Standard Deviation	477.90
Variance	228,392.65
Skewness	0.61
Kurtosis	2.64
Coefficient of Variability	0.42
Range Minimum	257.73
Range Maximum	2,947.39
Range Width	2,689.66
Mean Standard Error	2.14



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**Forecast: Gas in Gas Fields (cont'd)**

Percentiles:

<u>Percentile</u>	<u>BCFG</u>
100%	257.73
95%	495.30
90%	562.23
85%	621.34
80%	679.70
75%	736.53
70%	794.95
65%	853.75
60%	914.15
55%	976.69
50%	1,046.62
45%	1,117.47
40%	1,189.91
35%	1,269.61
30%	1,358.54
25%	1,450.91
20%	1,558.45
15%	1,677.55
10%	1,825.21
5%	2,018.39
0%	2,947.39

End of Forecast

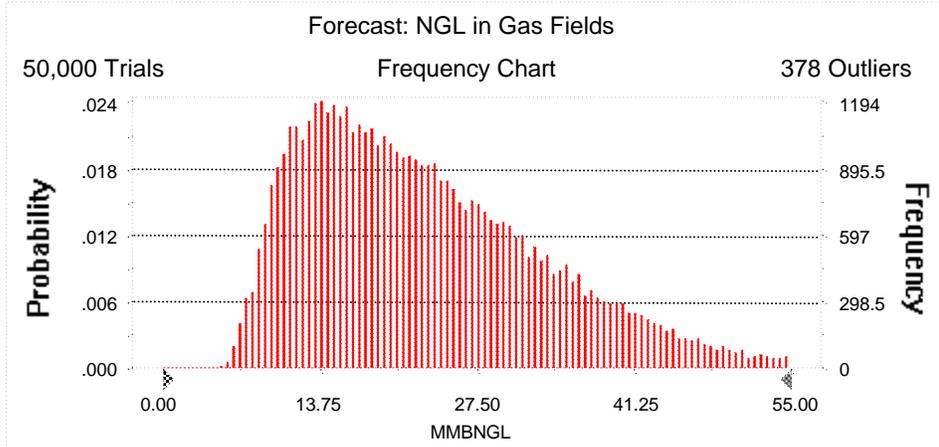
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**Forecast: NGL in Gas Fields**

Summary:

Display range is from 0.00 to 55.00 MMBNGL  
 Entire range is from 4.41 to 76.58 MMBNGL  
 After 50,000 trials, the standard error of the mean is 0.05

Statistics:	<u>Value</u>
Trials	50000
Mean	23.15
Median	21.18
Mode	---
Standard Deviation	10.68
Variance	113.97
Skewness	0.86
Kurtosis	3.49
Coefficient of Variability	0.46
Range Minimum	4.41
Range Maximum	76.58
Range Width	72.17
Mean Standard Error	0.05



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**Forecast: NGL in Gas Fields (cont'd)**

Percentiles:

<u>Percentile</u>	<u>MMBNGL</u>
100%	4.41
95%	9.57
90%	11.06
85%	12.34
80%	13.57
75%	14.74
70%	15.93
65%	17.16
60%	18.47
55%	19.78
50%	21.18
45%	22.64
40%	24.15
35%	25.81
30%	27.67
25%	29.67
20%	31.89
15%	34.67
10%	38.19
5%	43.41
0%	76.58

End of Forecast

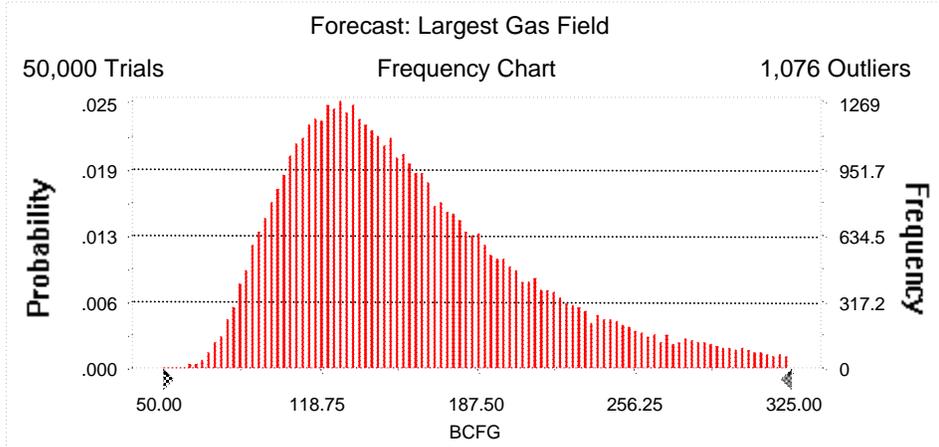
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**Forecast: Largest Gas Field**

Summary:

Display range is from 50.00 to 325.00 BCFG  
Entire range is from 54.66 to 399.99 BCFG  
After 50,000 trials, the standard error of the mean is 0.26

Statistics:	<u>Value</u>
Trials	50000
Mean	162.14
Median	149.03
Mode	---
Standard Deviation	58.68
Variance	3,443.04
Skewness	1.22
Kurtosis	4.60
Coefficient of Variability	0.36
Range Minimum	54.66
Range Maximum	399.99
Range Width	345.33
Mean Standard Error	0.26



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**Forecast: Largest Gas Field (cont'd)**

Percentiles:

<u>Percentile</u>	<u>BCFG</u>
100%	54.66
95%	91.60
90%	100.82
85%	108.07
80%	114.37
75%	120.20
70%	125.67
65%	131.19
60%	136.78
55%	142.76
50%	149.03
45%	155.61
40%	162.69
35%	170.53
30%	179.60
25%	190.04
20%	202.86
15%	219.43
10%	242.36
5%	282.05
0%	399.99

End of Forecast

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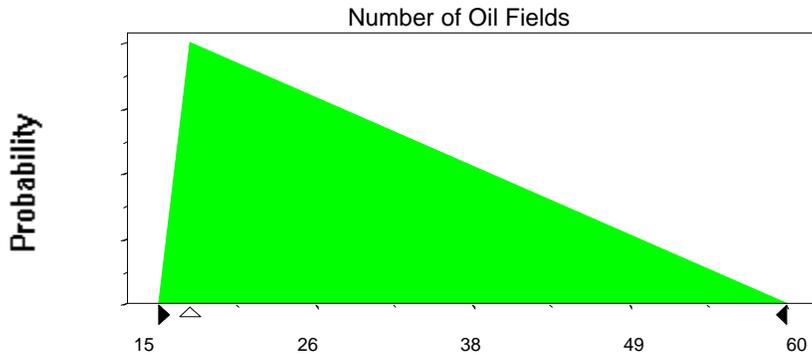
**Assumptions**

**Assumption: Number of Oil Fields**

Triangular distribution with parameters:

Minimum	15
Likeliest	17
Maximum	60

Selected range is from 15 to 60  
Mean value in simulation was 31



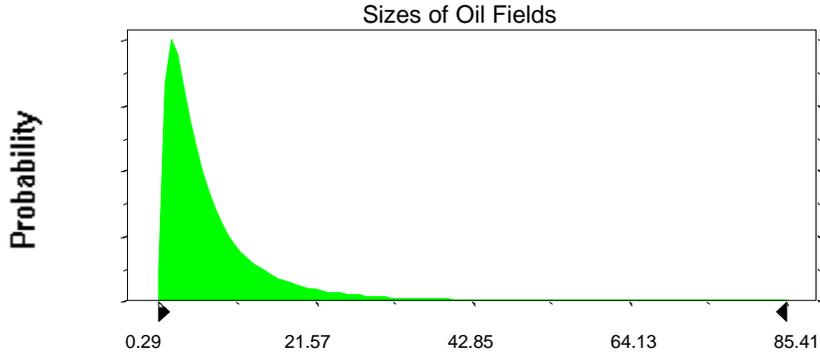
**Assumption: Sizes of Oil Fields**

Lognormal distribution with parameters:	Shifted parameters	
Mean	7.82	14.82
Standard Deviation	9.41	9.41

Selected range is from 0.00 to 93.00                      7.00 to 100.00  
Mean value in simulation was 7.67                                      14.67

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**Assumption: Sizes of Oil Fields (cont'd)**



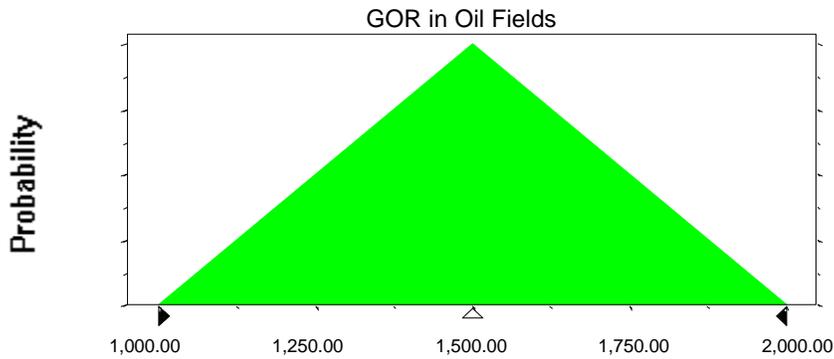
**Assumption: GOR in Oil Fields**

Triangular distribution with parameters:

Minimum	1,000.00
Likeliest	1,500.00
Maximum	2,000.00

Selected range is from 1,000.00 to 2,000.00

Mean value in simulation was 1,499.17



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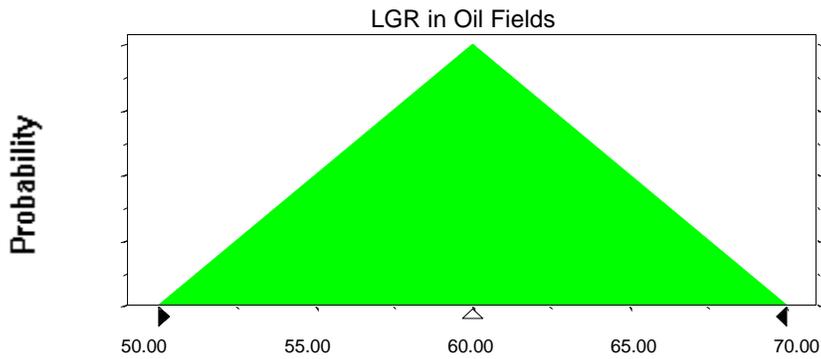
**Assumption: LGR in Oil Fields**

Triangular distribution with parameters:

Minimum	50.00
Likeliest	60.00
Maximum	70.00

Selected range is from 50.00 to 70.00

Mean value in simulation was 60.03



**Assumption: Number of Gas Fields**

Triangular distribution with parameters:

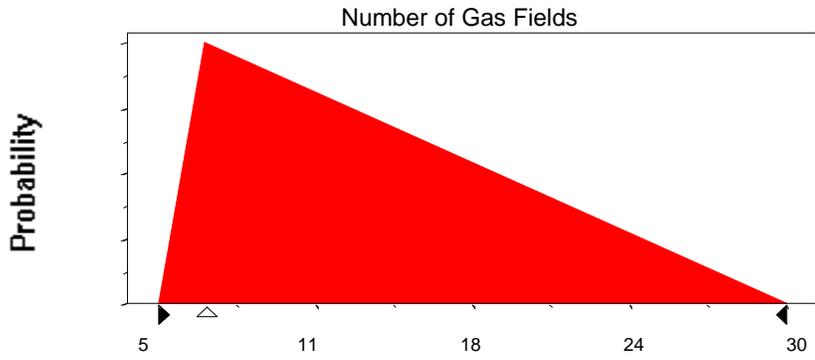
Minimum	5
Likeliest	7
Maximum	30

Selected range is from 5 to 30

Mean value in simulation was 14

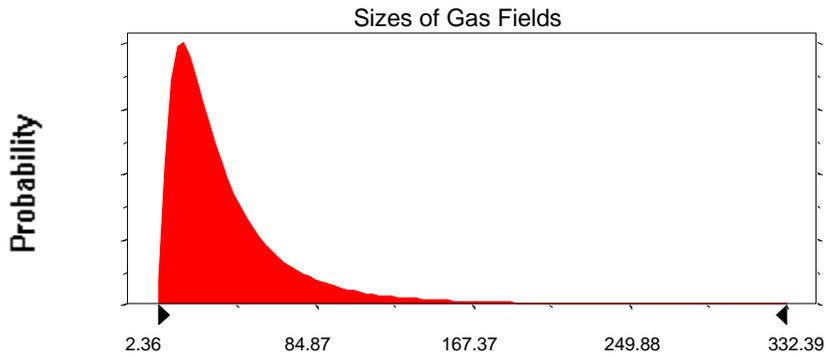
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Assumption: Number of Gas Fields (cont'd)



Assumption: Sizes of Gas Fields

Lognormal distribution with parameters:	Shifted parameters	
Mean	39.34	81.34
Standard Deviation	38.83	38.83
Selected range is from 0.00 to 358.00	42.00 to 400.00	
Mean value in simulation was 38.76	80.76	



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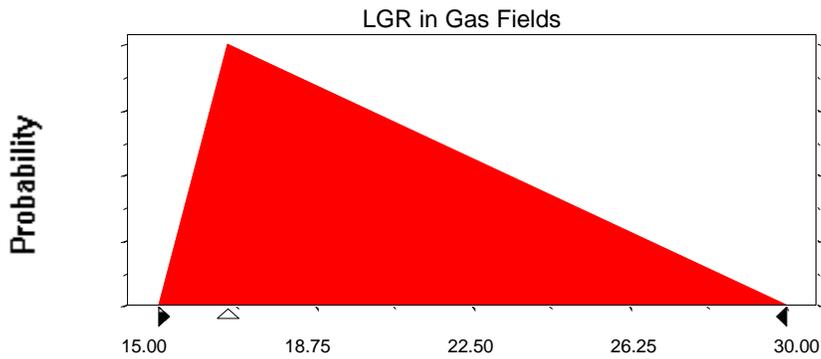
**Assumption: LGR in Gas Fields**

Triangular distribution with parameters:

Minimum	15.00
Likeliest	16.67
Maximum	30.00

Selected range is from 15.00 to 30.00

Mean value in simulation was 20.54



End of Assumptions

Simulation started on 12/8/98 at 12:06:33

Simulation stopped on 12/8/98 at 14:08:24